

IN THE CLAIMS:

Please cancel Claims 1-7, 9, 10, 12, 13, and 15-32 without prejudice or disclaimer of the subject matter presented therein.

Please amend Claims 8, 11, and 14, and add new Claims 33-38, to read as follows. For the Examiner's convenience, a copy of all the pending claims are presented below. A marked-up version of the amended claims, showing the changes made thereto, is also attached.

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8. (Amended) The semiconductor device according to claim 33, wherein a power supply voltage of said correction circuit output chip is higher than a power supply voltage of said photo sensor chips.

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11. (Amended) The semiconductor device according to claim 33, wherein GND wiring for said correction circuit output chip and GND wiring for said photo sensor chips are isolated from each other on said mounting substrate.

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14. (Amended) The semiconductor device according to claim 8, wherein GND wiring for said correction circuit output chip and GND wiring for said photo sensor chips are isolated from each other on said mounting substrate.

33. (New) An image sensor comprising:

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a plurality of photo sensor chips mounted on a mounting substrate,
each photo sensor chip having a plurality of photoelectric conversion circuits, a common
output line through which signals from said plurality of photo-electric conversion circuits
are outputted, and a photo sensor chip output device which outputs signals from said
common output line to outside of said photo sensor chip; and

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a correction circuit output chip mounted on said mounting substrate,
said correction circuit output chip having a noise compensation circuit which compensates
for a noise component included in a photo-electric conversion signal read out from said
photo sensor chip output device, by using a noise signal read out from said photo sensor
chip output device,

wherein said correction circuit output chip is arranged commonly to
said plurality of photo sensor chips, and an output signal from said correction circuit output
chip is outputted from said mounting substrate for use off of said mounting substrate.

34. (New) The image sensor according to claim 33, wherein said noise
compensation circuit has a differential circuit which calculates a difference between a first
signal and a second signal and a clamp circuit connected to an output of said differential
circuit.

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35. (New) The image sensor according to claim 34, wherein said differential circuit calculates a difference between the noise signal and the photo-electric conversion signal read out from said photo sensor chip output device and said clamp circuit clamps a reset state of said common output line in said photo sensor chip.

36. (New) The image sensor according to claim 33, wherein said noise compensation circuit has a plurality of clamp circuits that are serially connected.

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37. (New) The image sensor according to claim 33, wherein said noise compensation circuit has a clamp circuit which clamps a reset state of said common output line in said photo sensor chip.

38. (New) A method of driving an image sensor, said image sensor including:

(a) a plurality of photo sensor chips mounted on a mounting substrate, each photo sensor chip having a plurality of photo-electric conversion circuits, a common output line through which signals from said plurality of photo-electric conversion circuits are outputted, and a photo sensor chip output device which outputs signals from said common output line to outside of said photo sensor chip; and

(b) a correction circuit output chip mounted on said mounting substrate, said correction circuit output chip having a noise compensation circuit,

wherein said correction circuit output chip is arranged commonly to said plurality of photo sensor chips, and an output signal from said correction circuit output